

Exhibit 15

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

SHAUNA WILLIAMS, et al.	:	
	:	
Plaintiffs	:	
	:	
v.	:	
	:	
REPRESENTATIVE DESTIN HALL,	:	23-CV-1057
in his official capacity as:	:	
Chair of the House Standing:	:	
Committee on Redistricting,	:	
et al.	:	
	:	
Defendants	:	
	:	
-----X	:	
	:	
NORTH CAROLINA STATE	:	
CONFERENCE OF THE NAACP,	:	
et al.	:	
	:	
Plaintiffs	:	
	:	23-CV-1104
v.	:	
	:	
PHILIP BERGER, in his	:	
official capacity as the	:	
President Pro Tempore of	:	
the North Carolina Senate,	:	
et al.	:	
	:	
-----X	:	

DEPOSITION OF SEAN P. TRENDE, Ph.D.
Monday, October 21, 2024
9:11 a.m.

Job No.: 557860
Pages: 1 - 304
Reported by: Linda M. Bahur, RPR

1 partial to the variance inflation factor, or VIF,
2 and the rule of thumb for that is a VIF of -- below
3 a VIF of 10 or maybe 5. You don't worry about
4 multicollinearity.

5 Q Let's turn back to your report. Give me
6 one second to share my screen. And we're back on
7 Exhibit 2 of your report in this case. And I
8 believe that on page 74, maybe starting on page 73,
9 you reimagine Dr. Rodden's regression. So instead
10 of breaking the dataset into three chunks of the
11 public and Democrat and Independents and running
12 three separate regressions, your model has four
13 variables, I believe. It has race, whether they
14 live in one of the cities, distance from the
15 population centroid of the district, and whether
16 they are registered as a Democrat. Is that right?

17 A Yeah. Yes.

18 Q Okay. Why did you include partisanship
19 in this model?

20 A So that we can more directly compare the
21 effects of race and politics and because it
22 actually allows for you to see the effects
23 controlling for race or controlling for politics
24 directly.

25 Q Is that approach of trying to directly

1 control for politics better than breaking the
2 dataset into three chunks?

3 A I think so.

4 Q And why is that?

5 A Because it allows you to directly
6 compare the effect of being Democratic versus your
7 race on your likelihood of being included in
8 District 6.

9 Q Are race and party highly correlated in
10 North Carolina?

11 A In North Carolina, yes.

12 Q Do you know roughly how correlated?

13 A I never ran a statewide regression, so I
14 don't know.

15 Q Do you have a general sense based on
16 your familiarity with the North Carolina politics?

17 A I think there's correlation to be sure,
18 but I don't know how strong it is. I know that in
19 the District 6 county envelope using Dr. Rodden's
20 data, it's like the correlation is .4.

21 Q And how did you reach that conclusion?

22 A I looked at Dr. Rodden's -- I looked at
23 the data that Dr. Rodden and I are using for the
24 regression here, which is different than the data
25 that Dr. Barber is using. And in this data, I ran

1 A Yeah.

2 Q And how would you say that changed
3 post-Milligan?

4 A Well, there's verbiage that I understand
5 from Milligan suggesting that no, a district is
6 reasonably configured when it conforms with
7 traditional redistricting criteria and that racial
8 gerrymandering is never a reasonably configured
9 district. And I might have just been confused or
10 incorrect on my understanding of pre-Milligan case
11 law, but that's what I understood.

12 Q Okay. Sticking with part two of your
13 report, I want to direct your attention to page 5,
14 back up towards the top. Let me know when you're
15 there.

16 A Okay.

17 Q All right. I want to look at the second
18 paragraph there where you start talking about the
19 eight elections that you used for election data.
20 Do you see that?

21 A Okay.

22 Q Am I right in understanding that you
23 used six races from 2020 and -- or, I'm sorry, five
24 races from 2020 and three races from 2022; is that
25 right?

1 A Yes.

2 Q Were there any other elections whose
3 results you considered in your analysis?

4 A No. I don't even know how much I used
5 political data in that portion of the report at
6 all. But no. That was what I used because that's
7 what the North Carolina legislature was using.

8 Q You anticipated my next question. So
9 you used that because the legislator was using
10 these elections; right?

11 A Yeah. Yeah. This is mostly relevant to
12 the first part of the report where we're talking
13 about intent, whether it's partisan intent or
14 racial intent. Like I said, I don't know how much
15 I really used partisan data in this portion of the
16 report.

17 Q Okay. Do you agree that recent
18 elections are more useful than older elections in
19 predicting voter behavior in the future?

20 A It really depends.

21 Q What does it depend on?

22 A How well the elections correlate with
23 outcomes.

24 Q What does that mean?

25 A You could have an older election that is

1 more populated areas of a district and away from
2 the less populated areas of a district?

3 A I don't know about that.

4 Q What would you disagree with about that?

5 A I didn't say I disagreed. I said I
6 don't know that I'd agree.

7 Q So if you don't agree and you don't
8 disagree, what do you think about that proposition?

9 A That leaves "I don't know."

10 Q So you would say I don't know in
11 response to that statement?

12 A Yes.

13 Q Okay. If I said "In my opinion, it
14 makes it easy to overlook the less populated areas
15 of a district," would you agree or disagree with
16 that statement?

17 A I don't know.

18 Q Okay. Voters in less populated areas
19 still need to be contained within some district in
20 a Redistricting Plan; is that right?

21 A That's right.

22 Q And would you agree or disagree with the
23 population that choropleths do a better job of
24 demonstrating when a lower number of voters is
25 evenly distributed throughout an area?

1 A I don't think choropleths tell you
2 anything about the distribution because all they
3 reflect are percentages.

4 Q Okay. How about choropleths of
5 relatively small subunits like precincts or VTEs,
6 does that tell you anything about the distribution
7 of voters across the less populated area?

8 A No, because a precinct with 10 people,
9 one of whom is a Republican, shows up the same with
10 a precinct with a thousand people, a hundred of
11 whom are Republicans. So you don't know the
12 distribution of individual Republicans across the
13 map from a choropleth regardless of the level.

14 Q But you do know the relative
15 distribution of people within that precinct or VTD;
16 fair to say?

17 A Relative -- you know the distribution
18 relative to the members of, I guess, what we might
19 call the outgroup in that precinct or VTD. Like,
20 you know, the ratio.

21 Q So maybe the better way to say it is you
22 know the proportion of the studied group within
23 that VTD?

24 A That's right.

25 Q Okay. What is your understanding of a

1 Q Where does it split it?

2 A I believe -- it's hard to tell from this
3 map, but it looks to me like some of the arms and
4 elbows are cut off of it, but I'm just looking from
5 this map.

6 Q Would you agree that the vast majority
7 of Rocky Mount is contained within Illustrative
8 Senate District 5?

9 A I'd say yeah, a substantial majority
10 just from looking at the map.

11 Q Okay. And if you want to turn to page
12 19 of the Fairfax rebuttal report, you'll see
13 Figure 7 there, which has a choropleth of the
14 Senate Illustrative District 5 with BVAP overlaid.
15 Do you see that?

16 A Yes.

17 Q And you see in the key the five
18 different levels for the two lowest levels are zero
19 to 20% BVAP and 20 to 24% BVAP? Do you see that?

20 A Yes.

21 Q And would you agree with me that there
22 are many precincts labeled that way in the portion
23 of Pitt County? Or not districts. I'm sorry.
24 VTDs labeled that way in the portion of Pitt County
25 that is contained within Senate Illustrative

1 District 5?

2 A Yes.

3 Q And would you also agree with me that
4 the southwestern border of Senate Illustrative
5 District 5 follows the Pitt County boundary?

6 A With Greene County?

7 Q Correct.

8 A Yes.

9 Q And if I can direct your attention to
10 the next page, page 20 of the rebuttal report. You
11 see Figure 8, which is a zoom-in on the Greenville
12 area of the Illustrative Plan with a choropleth of
13 the median household income overlaid? Do you see
14 that?

15 A Yes.

16 Q And the black line going down through
17 the center of this figure is the boundary of the
18 Senate Illustrative District 5; is that right?

19 A That's right.

20 Q And you'd agree that that line tracks
21 through Greenville to include the areas, the Census
22 tracts of Greenville that have lower median
23 household incomes in Pitt County and includes them
24 with the rest of Senate Illustrative District 5?

25 A I can't tell because I'm red-green color

1 MR. STRACH: Objection.

2 A Not as I sit here.

3 Q Okay. I want to turn back to Exhibit 4,
4 which is Part II of your report, and go to page 20.
5 Let me know when you're there.

6 A Okay.

7 Q I want to direct your attention to the
8 paragraph at the bottom of the page. And the first
9 two sentences are really -- let's focus on the
10 second sentence -- say "The district could have
11 made the city whole," referring to the city of
12 Rocky Mount, "but that likely would have reduced
13 the BVAP of neighboring District 5 below 50%," and
14 in parentheses, "(it is drawn to 50.2%) and would
15 force the district to give up more of Nash County."

16 Did I read that right?

17 A Yes.

18 Q How do you determine that that likely
19 would have reduced the BVAP of neighboring District
20 5 below 50%?

21 A Well, if you remove any of those high
22 BVAP precincts -- and those are all, you know, in
23 the remapping precincts in the city of Rocky Mount,
24 you can tell from the shading on the choropleth,
25 they're all heavily -- particularly that one --

1 well, I can point to it, but that does you no good.
2 There's one right on the boundary that's 70% plus
3 BVAP. That's not going to help a district that's
4 50.2%. Probably going to drop it below 50% because
5 50.2% doesn't allow you to take many heavily Black
6 precincts out of a district.

7 Q That assumes no other changes to House
8 District 5; right?

9 A Right.

10 Q Did you check to see whether House
11 District 5 could be confirmed as a majority BVAP
12 district even if it didn't include that precinct
13 that you identify?

14 A It may be possible. I don't know if it
15 would be possible to do it if the cascade that
16 would occur into, I think, District 27. So maybe
17 that's the one that ends up getting reduced, but
18 since all these districts are drawn so closely to
19 50%, I don't think you can draw a 50 -- whatever
20 this would end up, I think, like, 54% BVAP district
21 and still have the other two above 50%.

22 Q Did you try?

23 A Yeah.

24 Q And you were unsuccessful?

25 A Yeah.

1 You're talking about past Illustrative District 5
2 here still. You say, "The court does not reveal
3 anything particularly interesting."

4 Did I read that right?

5 A Yes.

6 Q And then if we go to page 22, that's the
7 choropleth we're talking about; right?

8 A Yes.

9 Q Is the fact that the choropleth doesn't
10 reveal anything particularly interesting another
11 way of saying the Black population is evenly
12 disbursed throughout the district?

13 A No, because I don't think choropleths
14 tell you that much about the dispersion of
15 populations. I think dot density maps are better
16 for that. The choropleth maps tell you more about
17 how the maps were drawn. There wasn't anything
18 that jumped out as particularly interesting to me.

19 Q Okay. And I want to direct your
20 attention just below the choropleth there. The
21 first sentence of that paragraph, you say, "As you
22 can see with the dot density map, Black residents
23 are concentrated in Tarboro and Roanoke Rapids,
24 approximately 47 miles apart."

25 And then if you look at page 23, I think

1 Jowei Chen, J-O-W-E-I, wouldn't even say that
2 that's a traditional redistricting principle.

3 Q And in this sentence, you opine that
4 it's several of Mr. Fairfax's Illustrative
5 Districts that show this evidence. Which districts
6 are those?

7 A Map A25, Map A12, Map A23, Map A24, and
8 these are all House. Map B24 and Senate District
9 5A.

10 Q Okay. And moving to the last sentence
11 in this conclusion paragraph, you say, "Mr.
12 Fairfax's Illustrative Districts are generally less
13 compact than the Enacted Map."

14 Did I read that right?

15 A Yes.

16 Q What do you base this conclusion on?

17 A There's tables that I've included in my
18 report to compare the compactness of the Enacted
19 Map to his Illustrative Maps. And generally
20 speaking, the Illustrative Map Districts are less
21 compact than their Enacted Map counterparts.

22 Q So it's it a district-by-district
23 comparison?

24 A Yes.

25 Q And it's based on the two compactness